

PROJECT DESCRIPTION:

**Limits:** State Route 28 from the State Route 267 Intersection to the Chipmunk Street Intersection

**Proposed Improvement (Scope):** Two 12' Traffic Lanes with 12' Two-Way-Left-Turn-Lane. 5' Bike Lane, sidewalks and parallel parking on both sides of SR-28. Roundabouts at the Bear Street and Coon Street Intersections.

**Alternative:** **2: 3-Lane w/On-Street Parking and 2 Roundabouts**

SUMMARY OF PROJECT COST ESTIMATE

TOTAL ROADWAY ITEMS	\$29,196,630
TOTAL STRUCTURE ITEMS	\$0
SUBTOTAL CONSTRUCTION COSTS	\$29,196,630
TOTAL RIGHT OF WAY ITEMS	\$743,682
TOTAL PROJECT CAPITAL OUTLAY COSTS	\$29,940,312

Reviewed by Project Manager  
Dokken Engineering

Signature

Approved by Project Engineer  
Dokken Engineering

Signature

Phone No. 916-858-0642 Date December 1, 2006

I. ROADWAY ITEMS

<u>Section 1 Earthwork</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>	<u>Section Cost</u>
Roadway Excavation	17,194	M <sup>3</sup>	\$90	\$1,547,460	
Imported Borrow					
Clearing & Grubbing	1	LS	\$50,000	\$50,000	
Develop Water Supply	1	LS	\$5,000	\$5,000	
			Subtotal Earthwork		\$1,602,460
<u>Section 2 Pavement Structural Section*</u>					
PCC Pavement (____ Depth)					
PCC Pavement (____ Depth)					
Asphalt Concrete	10,606	TONNE	\$110	\$1,166,660	
Lean Concrete Base					
Cement-Treated Base					
Aggregate Base	10,265	M <sup>3</sup>	\$110	\$1,129,150	
Treated Permeable Base					
Aggregate Subbase					
Pavement Reinforcing Fabric					
Edge Drains					
Remove AC Dike					
AC Dike					
Cold Plane AC	5,000	M <sup>2</sup>	\$10	\$50,000	
			Subtotal Pavement Structural Section		\$2,345,810
<u>Section 3 Drainage</u>					
Large Drainage Facilities	1	LS	\$1,500,000	\$1,500,000	
Project Drainage	1	LS	\$500,000	\$500,000	
			Subtotal Drainage		\$2,000,000

<u>Section 4 Specialty Items</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>	<u>Section Cost</u>
Storm Water Pollution Prevention Plan	1	LS	\$50,000	\$50,000	
Water Pollution Control	50,000	M <sup>2</sup>	\$10.00	\$500,000	
Retaining Walls	1,000	M <sup>2</sup>	\$800.00	\$800,000	
Noise Barriers					
Barriers and Guardrails (Temp K Rail)	3,692	M	\$35.00	\$129,220	
Equipment/Animal Passes					
Highway Planting	932	M <sup>2</sup>	\$100.00	\$93,200	
Replacement Planting					
Irrigation Modification					
Relocate Private Irrigation Facilities					
Erosion Control	8,000	M <sup>2</sup>	\$10.00	\$80,000	
Slope Protection					
Temp Fence	2,100	M	\$30.00	\$63,000	
Hazardous Waste Mitigation Work					
Environmental Mitigation	1	LS	\$200,000	\$200,000	
Driveway/Valley Gutter	1	LS	\$130,000.00	\$130,000	
Curb and Gutter	4,250	M	\$200.00	\$850,000	
Sidewalk	9,387	M <sup>2</sup>	\$120.00	\$1,126,440	
Off-Core On-Street Parking	170	EA	\$36,000.00	\$6,120,000	
Off-Core Parking Lot Construction	41	EA	\$36,000.00	\$1,476,000	
Street Furniture	1	LS	\$100,000.00	\$100,000	
			Subtotal Specialty Items		\$11,717,860
<u>Section 5 Traffic Items</u>					
Lighting	1	LS	\$100,000	\$100,000	
Traffic Delineation Items	1	LS	\$10,000	\$10,000	
Traffic Signals					
Overhead Sign Structures	2	EA	\$50,000	\$100,000	
Roadside Signs	50	EA	\$750	\$37,500	
Traffic Control Systems	1	LS	\$100,000	\$100,000	
Transportation Management Plan	1	LS	\$462,000	\$462,000	
Remove Existing Striping	1	LS	\$50,000	\$50,000	
Temporary Striping	1	LS	\$50,000	\$50,000	
Striping	8,000	M	\$4.00	\$32,000	
Traffic Signal Modifications	2	LS	\$175,000	\$350,000	
			Subtotal Traffic Items		\$1,291,500
			TOTAL SECTION 1 thru 5		\$18,957,630.00

Section 6 Minor Items

	<u>Item Cost</u>	<u>Section Cost</u>
$\$ 18,957,630 \times (10.0\%) =$	<u>\$1,896,000</u>	
(Subtotal Sections 1 thru 5)		

TOTAL MINOR ITEMS \$1,896,000

Section 7 Roadway Mobilization

$\$ 20,853,630 \times (10.0\%) =$	<u>\$2,086,000</u>
(Subtotal Sections 1 thru 6)	

TOTAL ROADWAY MOBILIZATION \$2,086,000

Section 8 Roadway Additions

Supplemental Work

$\$ 20,853,630 \times (10.00\%) =$	<u>\$2,086,000</u>
(Subtotal Sections 1 thru 6)	

Contingencies

$\$ 20,853,630 \times 20\% =$	<u>\$4,171,000</u>
(Subtotal Sections 1 thru 6)	

TOTAL ROADWAY ADDITIONS \$6,257,000

TOTAL ROADWAY ITEMS \$29,196,630  
(Subtotal Sections 1 thru 8)

## II. STRUCTURES ITEMS

	Structure (1)	Structure (2)	Structure (3)
Bridge Name	<hr/>	<hr/>	<hr/>
Structure Type	<hr/>	<hr/>	<hr/>
Width (out to out) - (ft)	<hr/>	<hr/>	<hr/>
Bridge Length - (ft)	<hr/>	<hr/>	<hr/>
Total Area - (ft <sup>2</sup> )	<hr/>	<hr/>	<hr/>
Footing Type (pile/spread)	<hr/>	<hr/>	<hr/>
Cost Per ft <sup>2</sup> (incl. 10% mobilization and 25% contingency)	<hr/>	<hr/>	<hr/>
Total Cost for Structure	<hr/> \$ -	<hr/> \$ -	<hr/> \$ -
SUBTOTAL STRUCTURES ITEMS			<hr/> \$0
(Sum of Total Cost for Structures)			
Seismic Retrofit	<hr/> (Included in above cost)		
Railroad Related Costs:	<hr/> None		
SUBTOTAL RAILROAD ITEMS			<hr/> <hr/>
TOTAL STRUCTURES ITEMS			<hr/> \$0
(Sum of Structures Items plus Railroad Items)			

### III. RIGHT OF WAY ITEMS

#### ESCALATED VALUE

A. Acquisition, including excess lands,  
damages to remainder(s) and Goodwill

\$477,032

B. Utility Relocation (County share)

\$0

C. Relocation Assistance

\$0

D. Clearance/Demolition

\$0

E. Title and Escrow Fees

\$166,650

TOTAL RIGHT OF WAY ITEMS

\$643,682

(Current Value)

Anticipated Date of Right of Way Certification  
(Date to which Values are Escalated)

March, 2008

F. Construction Contract Work

\$100,000

7 businesses will need sign relocations, and one business will need modification to an awning. Short retaining walls (less than 1.2 m (4') will be necessary along portions of the project. The retaining walls will make driveway modifications necessary for 13 driveways. The CCW for these 13 driveways is supplemental to the amount included in the project cost estimate for driveway conforms due to the extra level of difficulty for these locations.

#### COMMENTS:

Right-of-way estimate based on:

\$1,000,000/acre (Residential/Commerical)

10% Escalation Rate (3.33% per year, 3 years)

10% of property value for TCE

**PROJECT DESCRIPTION:**

**Limits:** \_\_\_\_\_ State Route 28 from the State Route 267 Intersection to the Chipmunk Street Intersection

**Proposed Improvement (Scope):** \_\_\_\_\_ 4-11' Traffic Lanes. 5' Bike Lane, parallel parking and sidewalks on both sides of SR-28.

**Alternative:** **3: 4-Lane w/On-Street Parking and Turn Pockets**

**SUMMARY OF PROJECT COST ESTIMATE**

<b>TOTAL ROADWAY ITEMS</b>	<u>\$30,624,847</u>
<b>TOTAL STRUCTURE ITEMS</b>	<u>\$0</u>
<b>SUBTOTAL CONSTRUCTION COSTS</b>	<u>\$30,624,847</u>
<b>TOTAL RIGHT OF WAY ITEMS</b>	<u>\$726,014</u>
<b>TOTAL PROJECT CONSTRUCTION COSTS</b>	<u>\$31,350,861</u>

Reviewed by Project Manager  
Dokken Engineering \_\_\_\_\_  
Signature

Approved by Project Engineer  
Dokken Engineering \_\_\_\_\_  
Signature

Phone No. 916-858-0642 Date December 1, 2006

I. ROADWAY ITEMS

<u>Section 1 Earthwork</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>	<u>Section Cost</u>
Roadway Excavation	18,527	M <sup>3</sup>	\$90	\$1,667,430	
Imported Borrow					
Clearing & Grubbing	1	LS	\$50,000	\$50,000	
Develop Water Supply	1	LS	\$5,000	\$5,000	
			Subtotal Earthwork		\$1,722,430
<u>Section 2 Pavement Structural Section*</u>					
PCC Pavement (____ Depth)					
PCC Pavement (____ Depth)					
Asphalt Concrete	11,542	TONNE	\$110	\$1,269,620	
Lean Concrete Base					
Cement-Treated Base					
Aggregate Base	11,283	M <sup>3</sup>	\$110	\$1,241,130	
Treated Permeable Base					
Aggregate Subbase					
Pavement Reinforcing Fabric					
Edge Drains					
Remove AC Dike					
AC Dike					
Cold Plane AC	5,000	M <sup>2</sup>	\$10	\$50,000	
			Subtotal Pavement Structural Section		\$2,560,750
<u>Section 3 Drainage</u>					
Large Drainage Facilities	1	LS	\$1,500,000	\$1,500,000	
Project Drainage	1	LS	\$500,000	\$500,000	
			Subtotal Drainage		\$2,000,000



<u>Section 4 Specialty Items</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>	<u>Section Cost</u>
Storm Water Pollution Prevention Plan	1	LS	\$50,000	\$50,000	
Water Pollution Control	50,000	M <sup>2</sup>	\$10.00	\$500,000	
Retaining Walls	1,000	M <sup>2</sup>	\$800.00	\$800,000	
Noise Barriers					
Barriers and Guardrails (Temp K Rail)	3,543	M	\$35.00	\$124,005	
Equipment/Animal Passes					
Highway Planting	1,441	M <sup>2</sup>	\$100.00	\$144,050	
Replacement Planting					
Irrigation Modification					
Relocate Private Irrigation Facilities					
Erosion Control	8,000	M <sup>2</sup>	\$10.00	\$80,000	
Slope Protection					
Temp Fence	2,100	M	\$30.00	\$63,000	
Hazardous Waste Mitigation Work					
Environmental Mitigation	1	LS	\$200,000	\$200,000	
Driveway/Valley Gutter	1	LS	\$130,000.00	\$130,000	
Curb and Gutter	3,543	M	\$200.00	\$708,600	
Sidewalk	10,925	M <sup>2</sup>	\$120.00	\$1,311,024	
Off-Core On-Street Parking	170	EA	\$36,000.00	\$6,120,000	
Off-Core Parking Lot Construction	41	EA	\$36,000.00	\$1,476,000	
Street Furniture	1	LS	\$100,000.00	\$100,000	
			Subtotal Specialty Items		\$11,806,679
<u>Section 5 Traffic Items</u>					
Lighting	1	LS	\$100,000	\$100,000	
Traffic Delineation Items	1	LS	\$10,000	\$10,000	
Traffic Signals	2	LS	\$250,000	\$500,000	
Overhead Sign Structures	2	EA	\$50,000	\$100,000	
Roadside Signs	50	EA	\$750	\$37,500	
Traffic Control Systems	1	LS	\$100,000	\$100,000	
Transportation Management Plan	1	LS	\$462,000	\$462,000	
Remove Existing Striping	1	LS	\$50,000	\$50,000	
Temporary Striping	1	LS	\$50,000	\$50,000	
Striping	8,872	M	\$4.00	\$35,488	
Traffic Signal Modifications	2	LS	\$175,000	\$350,000	
			Subtotal Traffic Items		\$1,794,988
			TOTAL SECTION 1 thru 5		\$19,884,846.62

Section 6 Minor Items

	<u>Item Cost</u>	<u>Section Cost</u>
$\$ 19,884,847 \times (10.0\%) =$	<u>\$1,989,000</u>	
(Subtotal Sections 1 thru 5)		

TOTAL MINOR ITEMS \$1,989,000

Section 7 Roadway Mobilization

$\$ 21,873,847 \times (10.0\%) =$	<u>\$2,188,000</u>
(Subtotal Sections 1 thru 6)	

TOTAL ROADWAY MOBILIZATION \$2,188,000

Section 8 Roadway Additions

Supplemental Work

$\$ 21,873,847 \times (10.00\%) =$	<u>\$2,188,000</u>
(Subtotal Sections 1 thru 6)	

Contingencies

$\$ 21,873,847 \times 20\% =$	<u>\$4,375,000</u>
(Subtotal Sections 1 thru 6)	

TOTAL ROADWAY ADDITIONS \$6,563,000

TOTAL ROADWAY ITEMS \$30,624,847  
(Subtotal Sections 1 thru 8)

## II. STRUCTURES ITEMS

	Structure (1)	Structure (2)	Structure (3)
Bridge Name	<hr/>	<hr/>	<hr/>
Structure Type	<hr/>	<hr/>	<hr/>
Width (out to out) - (ft)	<hr/>	<hr/>	<hr/>
Bridge Length - (ft)	<hr/>	<hr/>	<hr/>
Total Area - (ft <sup>2</sup> )	<hr/>	<hr/>	<hr/>
Footing Type (pile/spread)	<hr/>	<hr/>	<hr/>
Cost Per ft <sup>2</sup> (incl. 10% mobilization and 25% contingency)	<hr/>	<hr/>	<hr/>
Total Cost for Structure	<hr/> \$ -	<hr/> \$ -	<hr/> \$ -
	SUBTOTAL STRUCTURES ITEMS		<hr/> \$0
	(Sum of Total Cost for Structures)		
Seismic Retrofit	<hr/> (Included in above cost)		
	<hr/>		
Railroad Related Costs:	<hr/> None		
	SUBTOTAL RAILROAD ITEMS		<hr/> <hr/>
	TOTAL STRUCTURES ITEMS		<hr/> \$0
	(Sum of Structures Items plus Railroad Items)		

### III. RIGHT OF WAY ITEMS

#### ESCALATED VALUE

A. Acquisition, including excess lands,  
damages to remainder(s) and Goodwill

\$459,364

B. Utility Relocation (County share)

\$0

C. Relocation Assistance

\$0

D. Clearance/Demolition

\$0

E. Title and Escrow Fees

\$166,650

TOTAL RIGHT OF WAY ITEMS \$626,014  
(Current Value)

Anticipated Date of Right of Way Certification March, 2008  
(Date to which Values are Escalated)

F. Construction Contract Work

\$100,000

7 businesses will need sign relocations, and one business will need modification to an awning. Short retaining walls (less than 1.2 m (4') will be necessary along portions of the project. The retaining walls will make driveway modifications necessary for 13 driveways. The CCW for these 13 driveways is supplemental to the amount included in the project cost estimate for driveway conforms due to the extra level of difficulty for these locations.

#### COMMENTS:

Right-of-way estimate based on:

\$1,000,000/acre (Residential/Commerical)

10% Escalation Rate (3.33% per year, 3 years)

10% of property value for TCE

**PROJECT DESCRIPTION:**

**Limits:** \_\_\_\_\_ State Route 28 from the State Route 267 Intersection to the Chipmunk Street Intersection

**Proposed Improvement (Scope):** \_\_\_\_\_ Two 12' Traffic Lanes with 12' Two-Way-Left-Turn-Lane. 5' Bike Lane and sidewalks on both sides of SR-28. Roundabouts at the Bear Street and Coon Street Intersections.

**Alternative:** **4: 3-Lane w/No Parking & 2 Roundabouts**

**SUMMARY OF PROJECT COST ESTIMATE**

<b>TOTAL ROADWAY ITEMS</b>	<u>\$29,151,259</u>
<b>TOTAL STRUCTURE ITEMS</b>	<u>\$0</u>
<b>SUBTOTAL CONSTRUCTION COSTS</b>	<u>\$29,151,259</u>
<b>TOTAL RIGHT OF WAY ITEMS</b>	<u>\$743,682</u>
<b>TOTAL PROJECT CONSTRUCTION COSTS</b>	<u>\$29,894,941</u>

Reviewed by Project Manager  
Dokken Engineering \_\_\_\_\_  
Signature

Approved by Project Engineer  
Dokken Engineering \_\_\_\_\_  
Signature

Phone No. 916-858-0642 Date December 1, 2006

I. ROADWAY ITEMS

<u>Section 1 Earthwork</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>	<u>Section Cost</u>
Roadway Excavation	16,488	M <sup>3</sup>	\$90	\$1,483,920	
Imported Borrow					
Clearing & Grubbing	1	LS	\$50,000	\$50,000	
Develop Water Supply	1	LS	\$5,000	\$5,000	
			Subtotal Earthwork		\$1,538,920
<u>Section 2 Pavement Structural Section*</u>					
PCC Pavement (____ Depth)					
PCC Pavement (____ Depth)					
Asphalt Concrete	8,905	TONNE	\$110	\$979,550	
Lean Concrete Base					
Cement-Treated Base					
Aggregate Base	7,421	M <sup>3</sup>	\$110	\$816,310	
Treated Permeable Base					
Aggregate Subbase					
Pavement Reinforcing Fabric					
Edge Drains					
Remove AC Dike					
AC Dike					
Cold Plane AC	5,000	M <sup>2</sup>	\$10	\$50,000	
			Subtotal Pavement Structural Section		\$1,845,860
<u>Section 3 Drainage</u>					
Large Drainage Facilities	1	LS	\$1,500,000	\$1,500,000	
Project Drainage	1	LS	\$500,000	\$500,000	
			Subtotal Drainage		\$2,000,000

<u>Section 4 Specialty Items</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>	<u>Section Cost</u>
Storm Water Pollution Prevention Plan	1	LS	\$50,000	\$50,000	
Water Pollution Control	50,000	M <sup>2</sup>	\$10.00	\$500,000	
Retaining Walls	1,000	M <sup>2</sup>	\$800.00	\$800,000	
Noise Barriers					
Barriers and Guardrails (Temp K Rail)	3,692	M	\$35.00	\$129,220	
Equipment/Animal Passes					
Highway Planting	932	M <sup>2</sup>	\$100.00	\$93,200	
Replacement Planting					
Irrigation Modification					
Relocate Private Irrigation Facilities					
Erosion Control	7,322	M <sup>2</sup>	\$10.00	\$73,220	
Slope Protection					
Temp Fence	2,005	M	\$30.00	\$60,150	
Hazardous Waste Mitigation Work					
Environmental Mitigation	1	LS	\$200,000	\$200,000	
Driveway/Valley Gutter	1	LS	\$130,000.00	\$130,000	
Curb and Gutter	4,220	M	\$200.00	\$844,000	
Sidewalk	14,029	M <sup>2</sup>	\$120.00	\$1,683,465	
Off-Core On-Street Parking	170	EA	\$36,000.00	\$6,120,000	
Off-Core Parking Lot Construction	41	EA	\$36,000.00	\$1,476,000	
Street Furniture	1	LS	\$100,000.00	\$100,000	
			Subtotal Specialty Items		\$12,259,255
<u>Section 5 Traffic Items</u>					
Lighting	1	LS	\$100,000	\$100,000	
Traffic Delineation Items	1	LS	\$10,000	\$10,000	
Traffic Signals					
Overhead Sign Structures	2	EA	\$50,000	\$100,000	
Roadside Signs	50	EA	\$750	\$37,500	
Traffic Control Systems	1	LS	\$100,000	\$100,000	
Transportation Management Plan	1	LS	\$462,000	\$462,000	
Remove Existing Striping	1	LS	\$50,000	\$50,000	
Temporary Striping	1	LS	\$50,000	\$50,000	
Striping	5,931	M	\$4.00	\$23,724	
Traffic Signal Modifications	2	LS	\$175,000	\$350,000	
			Subtotal Traffic Items		\$1,283,224
			TOTAL SECTION 1 thru 5		\$18,927,258.57

Section 6 Minor Items

	<u>Item Cost</u>	<u>Section Cost</u>
$\$ 18,927,259 \times (10.0\%) =$	<u>\$1,893,000</u>	
(Subtotal Sections 1 thru 5)		

TOTAL MINOR ITEMS \$1,893,000

Section 7 Roadway Mobilization

$\$ 20,820,259 \times (10.0\%) =$	<u>\$2,083,000</u>
(Subtotal Sections 1 thru 6)	

TOTAL ROADWAY MOBILIZATION \$2,083,000

Section 8 Roadway Additions

Supplemental Work

$\$ 20,820,259 \times (10.00\%) =$	<u>\$2,083,000</u>
(Subtotal Sections 1 thru 6)	

Contingencies

$\$ 20,820,259 \times 20\% =$	<u>\$4,165,000</u>
(Subtotal Sections 1 thru 6)	

TOTAL ROADWAY ADDITIONS \$6,248,000

TOTAL ROADWAY ITEMS \$29,151,259  
(Subtotal Sections 1 thru 8)



## II. STRUCTURES ITEMS

	Structure (1)	Structure (2)	Structure (3)
Bridge Name	<hr/>	<hr/>	<hr/>
Structure Type	<hr/>	<hr/>	<hr/>
Width (out to out) - (ft)	<hr/>	<hr/>	<hr/>
Bridge Length - (ft)	<hr/>	<hr/>	<hr/>
Total Area - (ft <sup>2</sup> )	<hr/>	<hr/>	<hr/>
Footing Type (pile/spread)	<hr/>	<hr/>	<hr/>
Cost Per ft <sup>2</sup> (incl. 10% mobilization and 25% contingency)	<hr/>	<hr/>	<hr/>
Total Cost for Structure	<hr/> \$ -	<hr/> \$ -	<hr/> \$ -
	SUBTOTAL STRUCTURES ITEMS		<hr/> \$0
	(Sum of Total Cost for Structures)		
Seismic Retrofit	<hr/> (Included in above cost)		
	<hr/>		
Railroad Related Costs:	<hr/> None		
	SUBTOTAL RAILROAD ITEMS		<hr/> <hr/>
	TOTAL STRUCTURES ITEMS		<hr/> \$0
	(Sum of Structures Items plus Railroad Items)		

### III. RIGHT OF WAY ITEMS

#### ESCALATED VALUE

A. Acquisition, including excess lands,  
damages to remainder(s) and Goodwill

\$477,032

B. Utility Relocation (County share)

\$0

C. Relocation Assistance

\$0

D. Clearance/Demolition

\$0

E. Title and Escrow Fees

\$166,650

TOTAL RIGHT OF WAY ITEMS

\$643,682

(Current Value)

Anticipated Date of Right of Way Certification  
(Date to which Values are Escalated)

March, 2008

F. Construction Contract Work

\$100,000

7 businesses will need sign relocations, and one business will need modification to an awning. Short retaining walls (less than 1.2 m (4') will be necessary along portions of the project. The retaining walls will make driveway modifications necessary for 13 driveways. The CCW for these 13 driveways is supplemental to the amount included in the project cost estimate for driveway conforms due to the extra level of difficulty for these locations.

#### COMMENTS:

Right-of-way estimate based on:

\$1,000,000/acre (Residential/Commerical)

10% Escalation Rate (3.33% per year, 3 years)

10% of property value for TCE

The following pages contain Roadway Alternatives  
Information that was studied and rejected.

**PROJECT DESCRIPTION:**

**Limits:** State Route 28 from the State Route 267 Intersection to the Chipmunk Street Intersection

**Proposed Improvement (Scope):** Two 12' Westbound Traffic Lanes, 1-12' Eastbound Traffic Lane with 12' Two-Way-Left-Turn-Lane. 5' Bike Lane and sidewalk on both sides of SR-28. Roundabouts at the Bear & Coon Street Intersections.

**Alternative:** **5: 4-Lane, 1-Side On-Street Parking & 2 Roundabouts**

**SUMMARY OF BASE PROJECT COST ESTIMATE**

<b>TOTAL ROADWAY ITEMS</b>	<u>\$29,207,415</u>
<b>TOTAL STRUCTURE ITEMS</b>	<u>\$0</u>
<b>SUBTOTAL CONSTRUCTION COSTS</b>	<u>\$29,207,415</u>
<b>TOTAL RIGHT OF WAY ITEMS</b>	<u>\$743,682</u>
<b>TOTAL PROJECT CONSTRUCTION COSTS</b>	<u>\$29,951,097</u>

Reviewed by Project Manager  
Dokken Engineering \_\_\_\_\_  
Signature

Approved by Project Engineer  
Dokken Engineering \_\_\_\_\_  
Signature

Phone No. 916-858-0642 Date September 29, 2006

I. ROADWAY ITEMS

<u>Section 1 Earthwork</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>	<u>Section Cost</u>
Roadway Excavation	18,241	M <sup>3</sup>	\$90	\$1,641,690	
Imported Borrow		M <sup>3</sup>	\$85	\$0	
Clearing & Grubbing	1	LS	\$20,000	\$20,000	
Develop Water Supply	1	LS	\$2,000	\$2,000	
				Subtotal Earthwork	\$1,663,690
<u>Section 2 Pavement Structural Section*</u>					
PCC Pavement (____ Depth)					
PCC Pavement (____ Depth)					
Asphalt Concrete	10,645	TONNE	\$110	\$1,170,950	
Lean Concrete Base					
Cement-Treated Base					
Aggregate Base	10,297	M <sup>3</sup>	\$110	\$1,132,670	
Treated Permeable Base					
Aggregate Subbase					
Pavement Reinforcing Fabric					
Edge Drains					
Remove AC Dike					
AC Dike					
Cold Plane AC	5,000	M <sup>2</sup>	\$10	\$50,000	
				Subtotal Pavement Structural Section	\$2,353,620
<u>Section 3 Drainage</u>					
Large Drainage Facilities	1	LS	\$1,500,000	\$1,500,000	
Project Drainage	1	LS	\$500,000	\$500,000	
				Subtotal Drainage	\$2,000,000

<u>Section 4 Specialty Items</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>	<u>Section Cost</u>
Storm Water Pollution Prevention Plan	1	LS	\$50,000	\$50,000	
Water Pollution Control	50,000	M <sup>2</sup>	\$10.00	\$500,000	
Retaining Walls	1,000	M <sup>2</sup>	\$800.00	\$800,000	
Noise Barriers					
Barriers and Guardrails (Temp K Rail)	3,551	M	\$35.00	\$124,285	
Equipment/Animal Passes					
Highway Planting	962	M <sup>2</sup>	\$100.00	\$96,200	
Replacement Planting					
Irrigation Modification					
Relocate Private Irrigation Facilities					
Erosion Control	7,102	M <sup>2</sup>	\$10.00	\$71,020	
Slope Protection					
Temp Fence	1,825	M	\$30.00	\$54,750	
Hazardous Waste Mitigation Work					
Environmental Mitigation	1	LS	\$200,000	\$200,000	
Driveway/Valley Gutter	1	LS	\$130,000.00	\$130,000	
Curb and Gutter	4,110	M	\$200.00	\$822,000	
Sidewalk	9,364	M <sup>2</sup>	\$120.00	\$1,123,622	
Off-Core On-Street Parking	170	EA	\$36,000.00	\$6,120,000	
Off-Core Parking Lot Construction	41	EA	\$36,000.00	\$1,476,000	
Street Furniture	1	LS	\$100,000.00	\$100,000	
			Subtotal Specialty Items		\$11,667,877
<u>Section 5 Traffic Items</u>					
Lighting	1	LS	\$100,000	\$100,000	
Traffic Delineation Items	1	LS	\$10,000	\$10,000	
Traffic Signals					
Overhead Sign Structures	2	EA	\$50,000	\$100,000	
Roadside Signs	50	EA	\$750	\$37,500	
Traffic Control Systems	1	LS	\$100,000	\$100,000	
Transportation Management Plan	1	LS	\$462,000	\$462,000	
Remove Existing Striping	1	LS	\$50,000	\$50,000	
Temporary Striping	1	LS	\$50,000	\$50,000	
Striping	7,491	M	\$2.50	\$18,728	
Traffic Signal Modifications	2	LS	\$175,000	\$350,000	
			Subtotal Traffic Items		\$1,278,228
			TOTAL SECTION 1 thru 5		\$18,963,414.55

Section 6 Minor Items

	<u>Item Cost</u>	<u>Section Cost</u>
$\$ 18,963,415 \times (10.0\%) =$	<u>\$1,897,000</u>	
(Subtotal Sections 1 thru 5)		
<b>TOTAL MINOR ITEMS</b>		<u>\$1,897,000</u>

Section 7 Roadway Mobilization

$\$ 20,860,415 \times (10.0\%) =$	<u>\$2,087,000</u>	
(Subtotal Sections 1 thru 6)		
<b>TOTAL ROADWAY MOBILIZATION</b>		<u>\$2,087,000</u>

Section 8 Roadway Additions

Supplemental Work

$\$ 20,860,415 \times (10.00\%) =$	<u>\$2,087,000</u>	
(Subtotal Sections 1 thru 6)		

Contingencies

$\$ 20,860,415 \times 20\% =$	<u>\$4,173,000</u>	
(Subtotal Sections 1 thru 6)		

**TOTAL ROADWAY ADDITIONS** \$6,260,000

**TOTAL ROADWAY ITEMS** \$29,207,415  
(Subtotal Sections 1 thru 8)

## II. STRUCTURES ITEMS

	Structure (1)	Structure (2)	Structure (3)	
Bridge Name	_____	_____	_____	
Structure Type	_____	_____	_____	
Width (out to out) - (ft)	_____	_____	_____	
Bridge Length - (ft)	_____	_____	_____	
Total Area - (ft <sup>2</sup> )	_____	_____	_____	
Footing Type (pile/spread)	_____	_____	_____	
Cost Per ft <sup>2</sup> (incl. 10% mobilization and 25% contingency)	_____	_____	_____	
Total Cost for Structure	\$ -	\$ -	\$ -	
	SUBTOTAL STRUCTURES ITEMS			\$0
	(Sum of Total Cost for Structures)			
Seismic Retrofit	(Included in above cost)			
Railroad Related Costs.	None			
	SUBTOTAL RAILROAD ITEMS			
	TOTAL STRUCTURES ITEMS			\$0
	(Sum of Structures Items plus Railroad Items)			



### III. RIGHT OF WAY ITEMS

	ESCALATED VALUE
A. Acquisition, including excess lands, damages to remainder(s) and Goodwill	<u>\$477,032</u>
B. Utility Relocation (County share)	<u>\$0</u>
C. Relocation Assistance	<u>\$0</u>
D. Clearance/Demolition	<u>\$0</u>
E. Title and Escrow Fees	<u>\$166,650</u>
<b>TOTAL RIGHT OF WAY ITEMS</b>	<u><u>\$643,682</u></u>
(Current Value)	
Anticipated Date of Right of Way Certification (Date to which Values are Escalated)	<u>March, 2008</u>

F. Construction Contract Work \$100,000

7 businesses will need sign relocations, and one business will need modification to an awning. Short retaining walls (less than 1.2 m (4')) will be necessary along portions of the project. The retaining walls will make driveway modifications necessary for 13 driveways. The CCW for these 13 driveways is supplemental to the amount included in the project cost estimate for driveway conforms due to the extra level of difficulty for these locations.

#### COMMENTS:

Right-of-way estimate based on:

\$1,000,000/acre (Residential/Commerical)

10% Escalation Rate (3.33% per year, 3 years)

10% of property value for TCE